

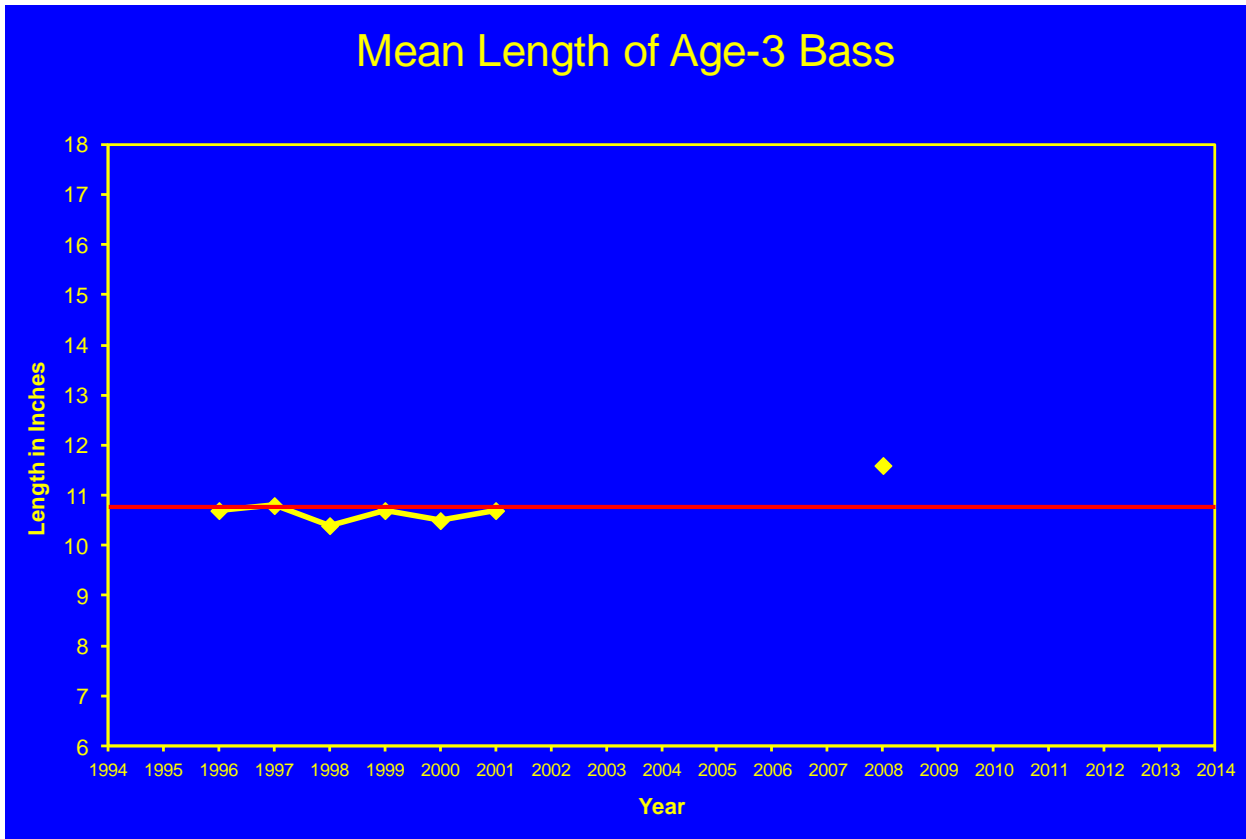
Grayson Lake Bass Assessment 2013

Grayson Lake is a 1,512-acre multipurpose reservoir on the Little Sandy River. This lake, located primarily in Carter County, is a clear, infertile reservoir that has developed into a popular fishing destination for largemouth bass, crappie, hybrid striped bass and catfish. The following graphs show trends and rankings for each of the five population parameters used in the largemouth bass assessment. Please see “Understanding the Largemouth Bass Assessment” article for an explanation of how the assessment works. *Please note that the minimum size limit for largemouth bass on this lake is 15.0 inches.*



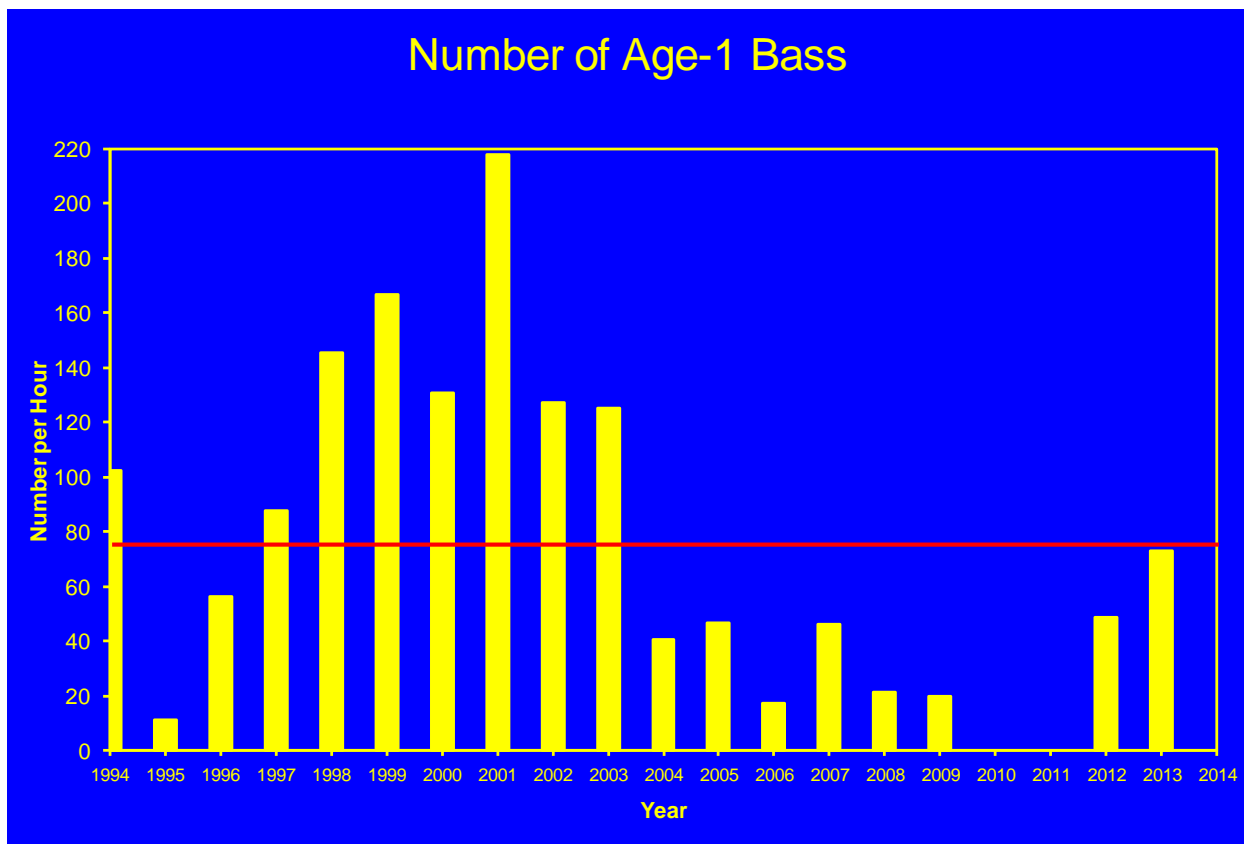
Parameter 1 – Length at age-3 (growth rate)

At Grayson Lake the length of an age-3 largemouth bass has averaged 10.8 inches since 1996 (represented by the red line). When compared to other lakes of similar size, the growth rate for largemouth bass at Grayson Lake is considered poor. The relatively stable growth rates from 1996 – 2001 slightly deviated in 2008 to 11.6 inches, this was the last year that KDFWR aged bass at Grayson Lake. Growth rates are generally related to factors such as population density, food resources, and weather patterns.



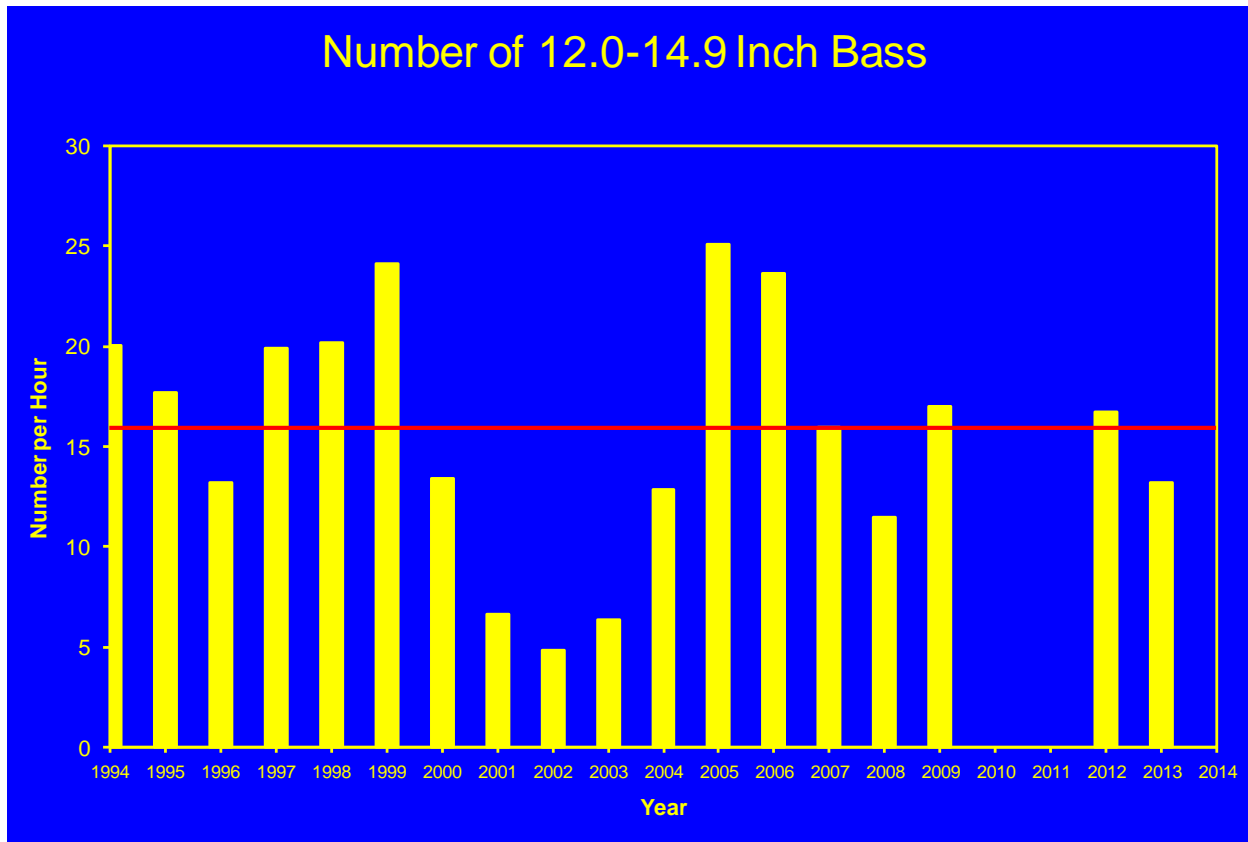
Parameter 2 – Numbers of age-1 bass (how good the spawn was)

KDFWR looks at the catch rate of age-1 largemouth bass to assess the success of the previous year's spawn. This is an important parameter because the number of age-1 bass produced represents how good the fishing will be once these fish grow large enough for anglers to catch. At Grayson Lake, age-1 largemouth bass catch rates have averaged just under 75.00 fish per hour (f/h) of electrofishing. When compared to other lakes of similar size, this is considered to be an excellent age-1 catch rate. Currently, the 2013 catch rate of 73.17 f/h is considered to be excellent and a boost from the 2012 catch rate of 48.50 f/h which was borderline good/excellent. In the last 21 years the catch rates of age-1 largemouth bass have been excellent 10 times and good 4 times. For the most part, Grayson Lake is far above average in terms of spawning success. Grayson Lake was not stocked in 2012 or 2013.



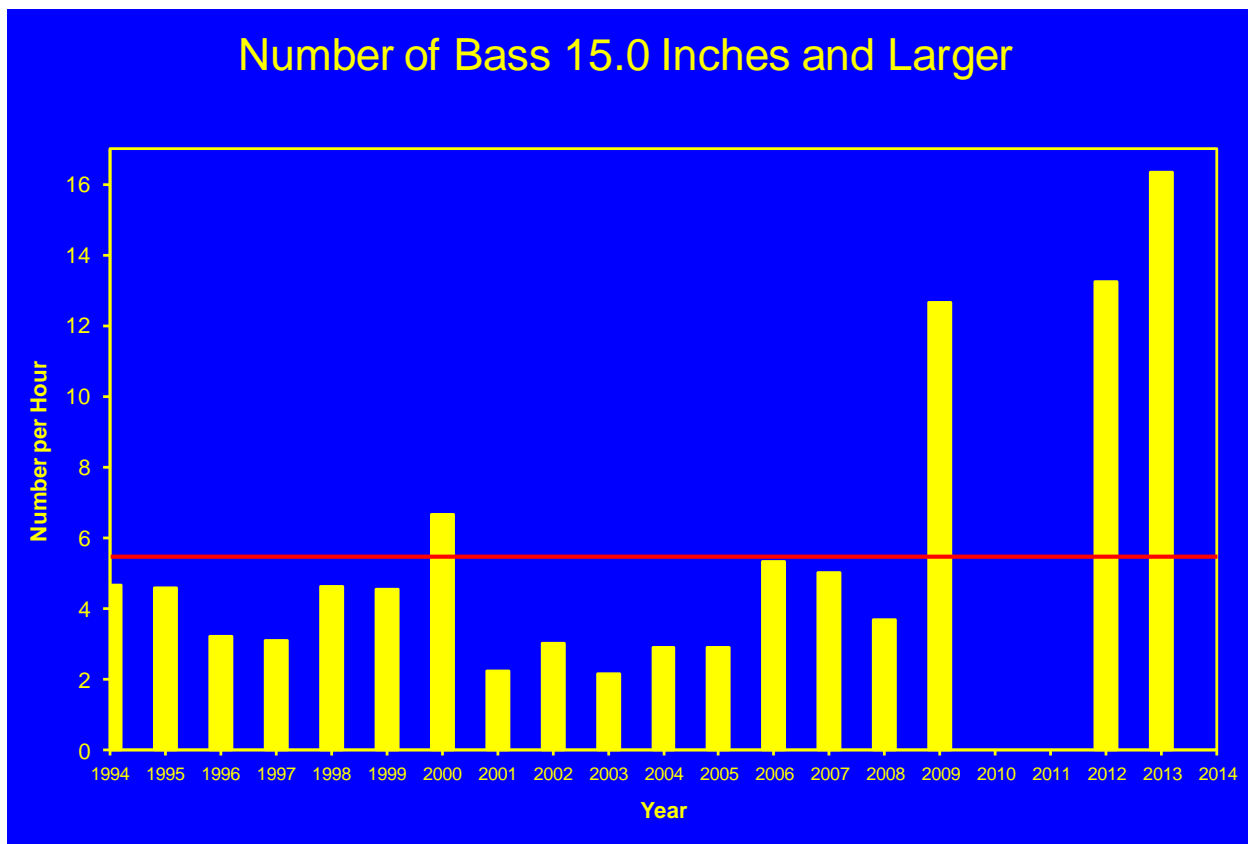
Parameter 3 – Numbers of 12.0-14.9 inch bass

The electrofishing catch of 12.0-14.9 inch largemouth bass has averaged just over 15.00 f/h since 1990, which barely puts Grayson Lake into the fair rating when compared to other lakes of similar size. In spite of the strong dip from 2000 – 2002, the lake has rebounded in recent years but still fluctuates right along the line between fair and poor. This value is important because these fish will hopefully grow to exceed the 15.0 inch legal size limit at the lake in the next couple years.



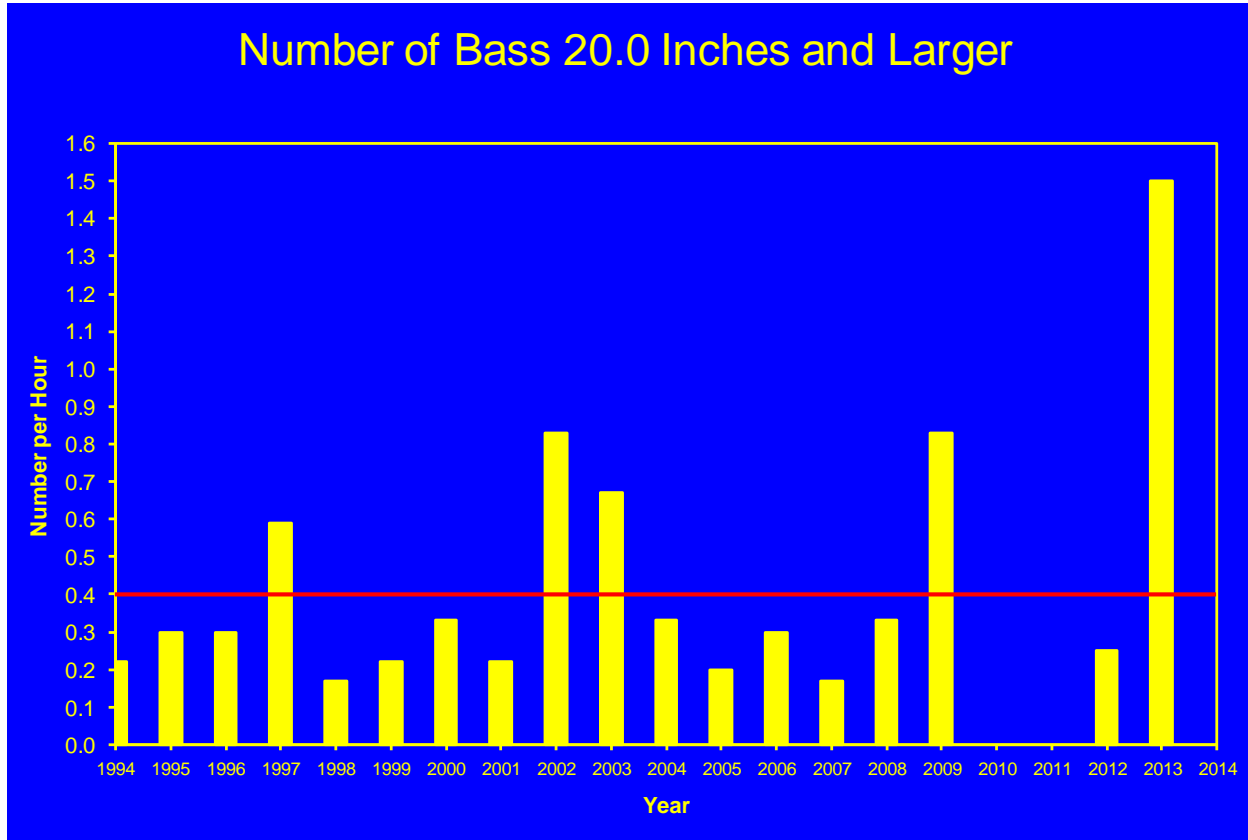
Parameter 4 – Numbers of 15.0 inch and larger bass

The electrofishing catch rate of 15.0 inch and larger largemouth bass has averaged 5.54 f/h since 1990. This is fair when compared to other lakes of similar size. In 2009, 2012 and 2013, biologists observed catch rates ranging from 12.67 f/h to 16.33 f/h, which was higher than any other year on record and is considered good. These high catch rates indicate that more fish are surviving past the 15.0 inch minimum size limit. Fishing most likely is better for these larger fish than it has been, but long term trends will dictate if this value continues to show improvement over historical trends.



Parameter 5 – Numbers of 20.0 inch and larger bass

The electrofishing catch rate of 20.0 inch and larger largemouth bass has averaged 0.40 f/h for Grayson Lake since 1990. As compared to other lakes of similar size, this is a fair catch rate for this size group. In 2013, biologists observed the highest catch rates of fish over 20.0 inches for Grayson Lake.



Overall – Total Assessment Score (All five parameters added together)

Overall, when compared to other lakes in Kentucky, the largemouth bass fishery at Grayson Lake has rated fair over the past 2 decades. The largemouth bass population at Grayson has been consistently fair, dipping into the poor rating only 3 times in the last 10 years and into the good rating only 2 times. The good thing for largemouth bass fisherman at Grayson Lake is that the last 2 years have provided the highest overall rating and the highest individual rating for catch rates of fish over 15.0 inches and fish over 20.0 inches. Time will tell if these catch rates of larger size fish remain high, but for now anglers should get out and enjoy the fishery.

